

folio

UNIVERSITY OF ALBERTA

Research aims to keep heart muscle healthier

Irene Poon

A University of Alberta researcher is hoping that replenishing a specific protein into heart muscles after a heart attack will significantly improve a patient's quality of life.

Zamaneh Kassiri is one of 19 researchers at the U of A who were successful in the 2009 independent investigator competition for the former Alberta Heritage Foundation for Medical Research, now Alberta Innovates Health Solutions, which included 130 applications.

Kassiri, a professor in the Department of Physiology, investigates the muscles in the heart, and how best to heal the heart after it is damaged by clogged arteries or a heart attack.

"The heart is made up of single cells, individual contracting cells, and there is a network that holds all these cells together to allow them to be synchronized and allow the heart to function as one unit," she said. "Our lab is interested in what happens to this extracellular matrix as the result of disease."

In a normal heart, the extracellular network is constantly turned over and renewed, said Kassiri. A certain type of protein "chews up" the matrix and allows it to be replenished, and a second type of protein that Kassiri calls the "good-cop" protein regulates the degrading molecules.

"What happens in disease is the balance is disturbed and you wind up with either too much degradation of the matrix or too little, which leads to accumulation of the matrix," she said. "What we have found so far is that the number of 'good-cop' molecules, which police the function of the degrading molecules, is significantly reduced in heart disease. If we can replenish these proteins into the heart, we are hoping that we can prevent the progression of the diseased heart and maintain its function efficiently, significantly improving the quality of a patient's life."

Kassiri's approach, a new kind of gene therapy, is to replenish the heart with the good proteins just after a heart attack.

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Page 2
Changing of the guard

Jane Halford replaces Jim Hole as Alumni Association president

Page 7
Conservation convergence

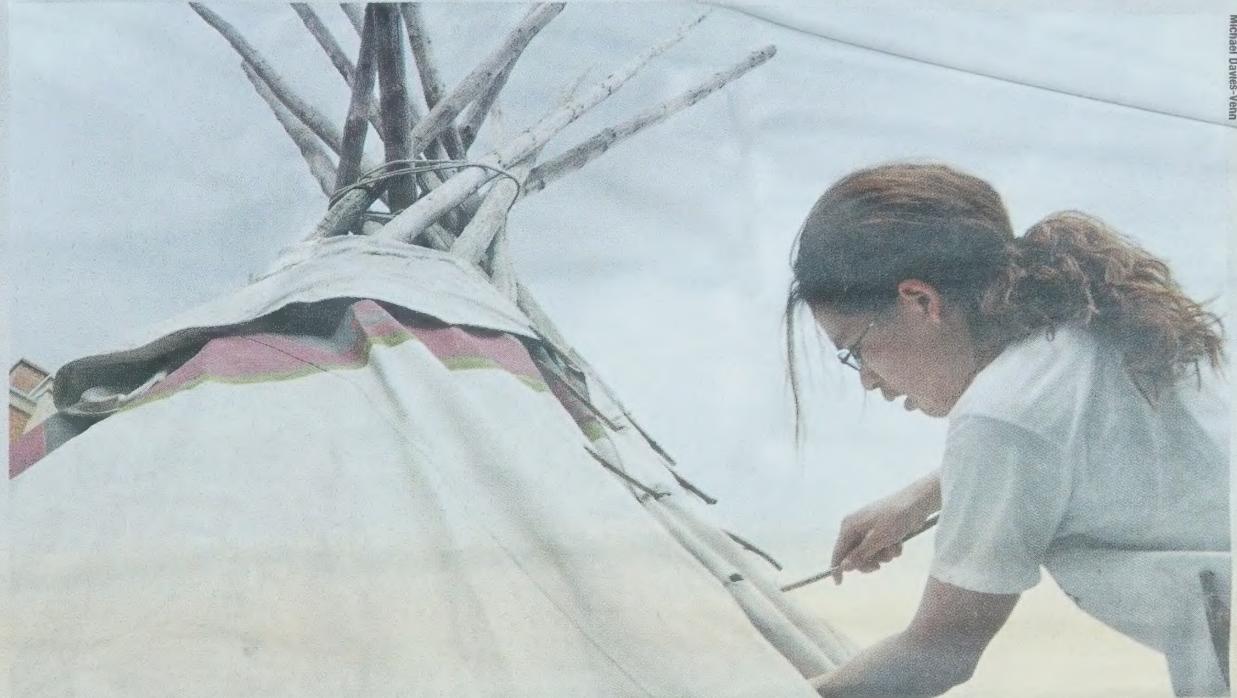
U of A playing host to conservation biology conference

Page 10
The Group of Seven

U of A Art Collection's Lawren Harris masterpiece on display

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Tipi finds its summer home



The Faculty of Native Studies and the Aboriginal Student Services Centre celebrating the raising of the tipi in front of Pembina Hall June 17.

Michael Davies-Vann

\$1.5M donation to fund rehab med's first research chair

Laurie Wang and Carmen Leibel

It's not every day that someone creates a research chair in their physical therapist's name, but Cathy Roozen did just that. She donated \$1.5 million this spring to establish the Dr. David Magee Endowed Chair in Musculoskeletal Research, the Faculty of Rehabilitation Medicine's first endowed research chair at the University of Alberta.

"It's just a real honour to play a role in making this happen," says Roozen, who has been a patient of Magee's for the past 10 years. "I have certainly benefited from his expertise. He's been an enormous asset over the years to the city and a credit to his university."

Magee is an internationally recognized physical therapist, author, associate dean and professor at the Faculty of Rehabilitation Medicine who can now add to his list of accomplishments having an endowed research chair named in his honour.

"This endowed chair will improve and maximize the physical-therapy care of patients to return them to a functional lifestyle. It's for clinical

research, to impact patients directly," says Magee.

The chair will be aimed at finding improved methods of clinical assessment for arthritis and injury prevention, and treatments for sports injuries and low-back pain.

Dean Martin Ferguson-Pell says the faculty expects to announce the successful candidate for the chair position by the end of the year.

"The Dr. David Magee Endowed Chair in Musculoskeletal Research will enable us to attract a leading researcher-clinician to build on the very strong musculoskeletal research and clinical expertise that resides within our faculty," says Ferguson-Pell.

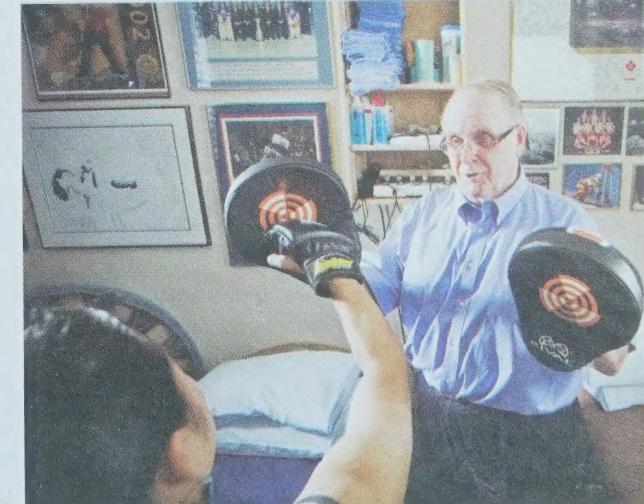
Magee's book, *Orthopedic Physical Assessment*, is considered to be the bible for many physical medicine and therapy professionals. Magee is a sought-after teacher and communicator and is frequently invited to speak by top universities around the world. He can also be credited for getting countless professional and Olympic athletes back in the game, including Wayne Gretzky, Jennifer Heil, Jamie Sale and Kevin Lowe.

"He's basically the Wayne Gretzky of rehabilitation medicine," said Lowe, a former NHL player and long-time patient. "I can't tell you how many times I wouldn't have been able to play unless he was there."

It's clear to see that Magee's passionate about what he does. He gets

an early start to the day as he treats the Edmonton Oilers in Corbett Hall at the U of A at 6 a.m., or sometimes even 5:30 a.m. He also has a student clinic that's available to the public free of charge.

"I enjoy what I do and I've been doing it for 40 years," says Magee. ■



David Magee can be credited for getting countless professional and Olympic athletes back in the game, including Wayne Gretzky, Jennifer Heil, Jamie Sale and Kevin Lowe.



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Unearthing the ultimate cold case

Jamie Hanlon

The body was found in a small, graffiti-stained tunnel. Robbery was likely not the motive, as his possessions and cash were found with him.

The University of Alberta's Sandra Garvie-Lok can't tell exactly how the victim on her table died, but she has a good idea. Given the visible previous cranial trauma on the body, the events that took place around the time of the murder and the location where his remains were found, she is willing to bet that this John Doe was murdered. Yet, no suspect will ever be tried or convicted for the crime. And she's OK with that.

That's because Garvie-Lok is an anthropologist, and her "victim" died almost 1,500 years ago in the ancient Greek city of Nemea during the Slavic invasion of Greece. Garvie-Lok, whose findings on her deceased subject were recently published in the *International Journal of Historical Archaeology*, suggests the victim was likely an eyewitness to the Slavic invasion of Nemea. The deceased possibly used the tunnel entrance as an escape from the invaders, where he died.

"The Slavs and Avars (another group of eastern European peoples) were pretty brutal," said Garvie-Lok, a professor in the Department of Anthropology. "If he was hiding in that unpleasant place, he was probably in a lot of danger. So, he hid out, but he didn't make it."

A specialist in osteology—a field of anthropology that studies bones—



Sandra Garvie-Lok is looking for the real story behind a 1,500-year-old murder.

Garvie-Lok was called in to the site to try to determine how the subject died. However, aside from the damage to the skull, which Garvie-Lok says are not related to the fatal injury that caused his death, there are no markings on the bones that would give her a definitive idea of the circumstances surrounding the victim's final hours or days.

But, she knows from the region's history, and from how he was found, that he lived during a very turbulent time. Like a detective, she pieces together a probable scenario of what happened around the time he succumbed to his injuries. Add into the mystery that he was found with some personal possession and several coins,

and Garvie-Lok can put a bit more together about his life.

"It was common in Greece when things fell apart for people to bury coins under a rock or inside a wall, hoping that whoever was coming through wouldn't find it and maybe they could collect the coins and move on after things calmed down," said Garvie-Lok. "Of course, things didn't calm down for this guy."

The ancient fatality was likely a local peasant farmer and not a soldier, she noted, since it was uncommon for the leaders of the Byzantine Empire to conscript. While it is possible that he was simply a "wrong place, wrong time" victim of a gallop-by spearing,

Garvie-Lok says he may have decided to join the fight in the hopes of defending himself, his family and his community. "Or he was pressed into service because everything was just going south; we can't be sure," says Garvie-Lok. "Either way, that he was hiding with his possession when he died is a pretty clear reflection that, for him, his world was ending," she said.

If her work sounds a lot like a form of ancient-crime CSI, Garvie-Lok agrees that while there are some parallels to solving mysteries, both ancient and current day, her job demands far more time and scrutiny than an hour-long television show depicts. The advantage in current crime-scene investigation is that police can formulate and hypothesize about how a crime was committed and then fill in more details when a suspect confesses. Her work, she muses, is a little more vague.

"In this job, you're always talking about likelihoods," she said. "Until we develop a time machine, we can't go back and know for sure."

For the would-be forensics technician who expects that the work will be much like it is on TV—"the whole 'we've-got-the-answer-in-12-hours' thing"—as she puts it, Garvie-Lok cautions that her work is much more laborious and time-consuming. That is where the story is found, and that is what draws her to this work.

"This kind of connection to people's lives is why I got into this," said Garvie-Lok. "I really do feel while I'm studying the bones that I'm touching someone else's life, I'm reaching out to the past.

"That's why I like this job." ■

Heart muscle

continued from page 1

"My hope is that within my lifetime, and with the help of my colleagues at the Mazankowski Alberta Heart Institute, we will be able to introduce this therapy for people with life-threatening heart conditions," she said.

Nineteen U of A researchers are receiving a total of between \$20–25 million over the next seven years from the independent investigator competition, said Alberta Innovates Health Solutions CEO Jacques Magnan.

"We support a lot of basic biomedical research—people who are looking at neuroscience or brain research, or people who work on the heart or diabetes, for example," he said. "But we also support people who are doing clinical research, health services research—people who look at the impact of policies on the health system, and are trying to develop more effective, cost-effective ways of delivering on the quality of care in Alberta."

Funding support at the U of A is being awarded to researchers in the faculties of agricultural, life & environmental sciences, medicine & dentistry, nursing and the school of public health.

"The main aim of these awards is to protect the time of people to do research and to help the universities recruit to Alberta, and to attract new investigators," said Magnan.

Kassiri, recruited to Alberta from the University of Toronto three years ago, is funded by Alberta Innovates Health Solutions, the Canadian Institutes of Health Research and a New Investigator award from the Heart & Stroke Foundation. ■

Chemical fingerprint a clue to colon cancer

Gloria Jensen

Every good detective knows that checking for fingerprints at a crime scene is an important step in finding the culprit. And, like a criminal, colon cancer leaves fingerprints—chemical fingerprints—that can lead to early detection.

Richard Fedorak, gastroenterology professor in the Faculty of Medicine & Dentistry and associate vice-president (research) at the University of Alberta, recently filed a patent through TEC Edmonton for a metabolomics-based diagnostic that may allow for early identification of colorectal cancer and also early detection of cancerous polyps, known as colonic adenomas.

Metabolomics refers to the identifi-

cation and measurement of small molecules called metabolites in cells, organs or organisms. Although the field is less than 10 years old, it is fast becoming the science of choice for applications in medicine, biotechnology and environmental technology sectors.

Alberta is Canada's, and perhaps North America's, leading centre in metabolomics research, and is recognized worldwide for its role in the development of this emerging science.

"Colon cancer affects 1,600 Albertans every year and kills 600 of these. Yet, colon cancer is completely preventable with screening and early detection," said Fedorak. "The current screening tests for colon cancer require a stool sample,

which is not very reliable and, often, a colonoscopy. The colonoscopy is a costly and invasive diagnostic test that requires extensive patient preparation and anesthesia."

Using metabolomics, Fedorak discovered that there are certain metabolites in a person's urine that are indicative of colon cancer. With pharmaceutical companies expressing interest in his discovery, TEC Edmonton's team did their due diligence through technology evaluation, intellectual-property protection and market research, determining the best commercialization strategy was to create a spin-off company. Fedorak's company, ColoDx, was incorporated in May 2010, becoming the U of A's first

spin-off in the area of metabolomics-based clinical diagnostics.

"ColoDx is designing a new screening tool for Albertans that will be simple, effective and inexpensive. It's as easy for the patient as a simple urine sample," said Fedorak.

Unlike the current blood test to screen for colon cancer, Fedorak's urine metabolomics screen has so far shown 88 per cent accuracy—putting it on par with colonoscopies. While his discovery is still undergoing clinical trials, TEC Edmonton is helping Fedorak by providing mentoring on business development and is developing ColoDx's business plan and financing strategy in order to move his technology closer to the market.

"TEC Edmonton has made the commercialization of my research project

seamless. They are professional, attentive to details, and exceedingly knowledgeable about the patent process and the business of commercialization," said Fedorak.

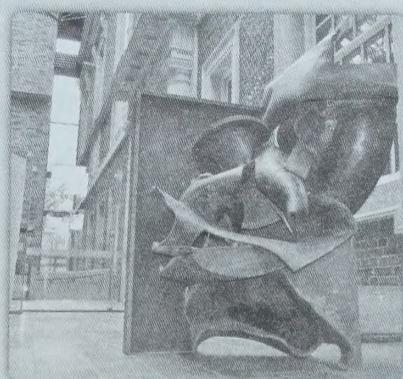
The future for ColoDx rests in its clinical trial and prototype development, moving to a "dipstick" test that could be provided to patients right in their doctor's offices.

"The significant commercial potential, along with the clinical utility of this technology, bodes well for the future success of ColoDx," said Randy Yatscoff, TEC Edmonton's executive vice-president of business development. "Successful commercialization will benefit the health of the population while facilitating diversification of the economy." ■

Are You a Winner?

Congratulations to Scott Delinger, whose name was drawn as part of folio's June 4 "Are You a Winner?" contest, after he correctly identified the object in the photo as the Mazankowski Alberta Heart Institute as seen from 112 St. For his keen eye, Delinger will receive a copy U of A alum Robert Kroetsch's "Too Bad: Sketches Toward a Self Portrait" courtesy of the U of A Press.

Up for grabs this week is a copy of "Taking the Lead: Strategies and Solutions from Female Coaches" edited by Sheila Robertson with a forward from Dru Marshall, U of A provost and vice-president (academic), courtesy of the U of A Press. To get your hands on this guide to sound leadership, simply identify where on campus the object of the picture is located. Email your correct answer to folio@exr.ualberta.ca by noon on Friday, July 8, and you will be entered into the draw.



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Music professor Tom Dust, the Convocation Band's conductor, in the orchestra pit at the Northern Alberta Jubilee Auditorium.

Words to live by

Folio Staff

As the University of Alberta celebrated its latest spring convocation this month, a lineup of innovators, scientists, world leaders and a famed Canadian pianist accepted honorary degrees and imparted these words of wisdom to the university's grads:

"I hope you are already living a good life, but now you have access to a wide range of powerful resources available to you to allow your contributions to this great land. Don't wear your degree like a ring, an unchanging object. It is merely a sign of your rite of passage. As in all professions . . . the value of a continual lifelong devotion to learning will serve you well, as it is actually a necessity."

~ Allan Wachowich, Justice of the Court of Queen's Bench of Alberta and U of A alumnus, who received an honorary doctor of laws degree June 2.

"Although this is a special day here at the university, it is also a good day to remember that the world is not ours alone. Any rights that we may claim for our species, for our nation, for our community, for our family, for ourselves on graduation day, must be in relation to the rights of other living things that abide with us."

~ Fred Roots, founder of the Polar Continental Shelf Project and famed conservationist, who received an honorary doctor of science degree June 3.

"Real leadership comes from the quiet nudging of our inner voice; it comes from realizing that the time has come to move from waiting to doing."

~ Victor Buffalo, a respected Alberta leader and entrepreneur whose pioneering work has helped First Nations businesses across Canada thrive, who received an honorary doctor of laws June 3.

"Many of [my] lessons have been painfully learned, by trial and error. The first lesson is possibly the most important: the value of risk taking, particularly in times of crisis and opportunity. Or, as I've been known to, in creating crisis in order to take advantage of the opportunity . . . it's a very valuable technique."

~ U of A alumnus Aubrey Tingle, a pediatric virologist who has made major contributions to the understanding of the rubella virus infection, who received an honorary doctor of science degree June 4.

The funding drives that helped to establish the university in Botswana and the creation of the new Augustana library "are wonderful representations of the spirit of collaboration, of humanness. It's an affirmation of the integrity of human experience mirrored in communities that are a world apart in various ways."

~ Helen Kay Rascroka, the University of Botswana's library director and the first African president of the International Federation of Library Associations and Institutions, who received an honorary doctor of laws degree at the June 7 convocation and spoke at Augustana Campus' convocation May 30.

"We are optimistic about the 'book.' We are not afraid of Kindles, E-books. We know that digitalization will open up the intellectual riches of the world's libraries for the benefit of people all over the world. We also know, from extensive research in many countries, that even a small number of books in a home can make a huge difference to a child in school."

~ Hugh Anson-Cartwright, famed antiquarian bookseller and champion of Canadian library collections, who received a doctor of laws degree June 8.

"This new way of living, this new way of working, is just starting to unfold. Our world is going to be reshaped by those of you who can see a new way forward. In times of change, you can take on bigger issues and make a bigger difference."

~ Brewster Kahle, co-founder of the world's largest digital library and philanthropist, who received a doctor of laws degree June 8.

"Yes, we feel disrupted . . . Yes, things are chaotic, but as it says in the Education of Henry Adams, 'Chaos often breeds life, when order breeds habit.' Have lives full of life."

~ James Neal, Columbia University librarian and champion of the digital transformation of modern libraries, on the digital revolution, who received an honorary doctor of laws degree June 8.

"We are all jointly involved in the reconstruction of a variety of histories, which provide us with insights into the past, and, in turn, enable us to better understand the present."

~ Romila Thapar, considered an unsurpassed authority on Indian history, who accepted an honorary doctor of laws degree June 9.

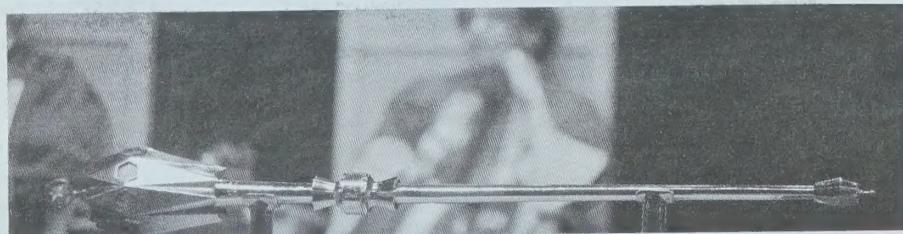
"Most chance encounters leave us untouched; some leave lasting effects, and still others branch us into new trajectories of life. Chance favours the inquisitive, the venturesome. Go places. Do things and explore new ideas and activities and you can make chance work for you by cultivating your interest, affirmative self beliefs and competencies. This enables you to make the most of opportunities that arise unexpectedly."

~ Albert Bandura, the pre-eminent living psychologist of the 20th century, who accepted an honorary doctor of laws degree on June 9.

Honorary degree recipient Angela Cheng, one of this nation's most gifted concert pianists, let her fingers do the talking for her during the June 10 convocation ceremonies. She received an honorary doctor of laws degree June 10.

"Plan on hitting singles all of your life to score runs. If you happen to hit one out of the park along the way, well that's a bonus, but plan on pounding your way through your career."

~ Patrick Daniel, U of A alumnus and CEO Of Enbridge, who received an honorary doctor of laws degree June 10.



the open door Rolling out the promise

Debra Pozega Osburn

Vice-president (external relations)

During the past few months, the University of Alberta has begun using the institutional promise that grew from our 2008 Centenary—a year that honoured our past, celebrated our present and opened the doors to our future.

As we drew together students and alumni, current and former faculty members, long-time stakeholders and partners, and many others in celebration and reflection during the Centenary, we also listened to ideas about the institution. What does it stand for? What does it look like to those who aren't familiar with it, and what does it mean to those who are? In short: what can people expect from the U of A? What is its promise?

At the same time, we identified the need to refine our ability to visually connect with diverse stakeholder groups through new, often digital, media. Our engagement with people of so many generations made it clear that we should consider refreshing our identity, in particular, our logo and wordmark, so that it translated to new media in a crisp, clear way, without leaving behind the strong elements that have provided our sense of place and spirit: the mountains, fields and icons of knowledge.

And we needed to do this within the parameters of our current budget in a way that could be implemented over time, through the normal course of the work undertaken at the U of A.

Led by chief creative officer Sandra Conn, the two years of work we've done since then have defined "uplifting the whole people"—taken from the words of our founding President Henry Marshall Tory—as the institutional promise, and have led to some modifications to the institutional logo that assure clear reproduction across media. These modifications are in a final stage of testing: you can access the survey and let us know what you think at www.

banister.ab.ca/UofA2010survey. Once the survey is completed and the input compiled, final results will be shared with the U of A community.

A few key points:

The promise is not a slogan, and will not replace our motto, "quaecumque vera," or "whatsoever things are true." The motto will remain the same. The notion of "uplifting the whole people" will help us frame, in the stories we tell, the impact of the institution.

The promise is an authentic, aspirational ideal that is deeply rooted in the U of A. Other institutions might opt for something that functions as a slogan; here, it's more of a guiding principle.

The work on both the logo and the promise have been done in-house by current staff within current budgets; the online survey, managed by an external firm, is part of a standard set of stakeholder outreach surveys that we've undertaken for the past 15 years or so.

Previous versions of the logo that are currently in use will not need to be replaced immediately. Changes would happen over the course of time as a part of the day-to-day work we do.

The whole process of identifying the promise and refreshing the logo has been energizing and affirming. As President Samarasekera noted in the January 2008 Centenary opening address, a century of work accomplished and dreams fulfilled have helped the U of A become one of the world's best institutions of its kind. And yet, she reflected, as the institution deliberated on how to celebrate itself as a modern institution, "In the end, we always came back to the same point: the U of A motto 'whatsoever things are true'—quaecumque vera—and our founding president's mandate that our institution should be dedicated to 'the uplifting of the whole people'."

Those two concepts remain the heart and soul of the U of A. Articulated today—one as the institution's motto, the other as its promise—they'll continue to define our university in the century ahead.

surf city

Here's something for the science nerd in all of us. The Canada Foundation for Innovation funds world-class research and their Innovation Canada website showcases some of the most fascinating science in the country. From terraforming Mars to water safety and cancer diagnosis to bionic limbs, Canadian researchers are on the cutting-edge of global science.

This month's offerings on Innovation Canada include a story about U of A Canada Research



Chair in Dinosaur Paleobiology
Philip Currie collaborating with artist Michael Skrepnick to visualize how dinosaurs might have appeared in their natural environment and to capture the image in painting.

www.innovationcanada.ca

Engineering award winners top of their class

Richard Cairney

Engineering students are busy people. Their course loads are challenging and there are student clubs and projects to participate in. Nominating a professor for a teaching award might not be at the top of their to-do list, no matter how good that professor is.

So when she received her Faculty of Engineering Undergraduate Teaching Award recently, environmental engineering professor Ania Ulrich felt particularly honoured because student support determines what professors win this particular award.



Ania Ulrich

"My students took time out of their lives and thought about me—so it's really touching to get an award like this," said Ulrich, who is in her second year of teaching environmental engineering. "I remember what it's like being an undergraduate student—it is intense, and you have a social life. So it's really special that they took time to do this."

Ulrich says she caught the teaching bug years ago while working on her undergraduate degree when she volunteered as an instructor with DiscoverE, a program designed to nurture an interest in engineering, science and technology among kids. She was also inspired by

her own Faculty of Engineering professors.

"I definitely had excellent teachers," said Ulrich, who studied chemical engineering and now applies her education and expertise to teaching environmental engineering students.

"I really love teaching—and I was determined to teach environmental engineering," she said. "You can help improve people's lives—it's an all-encompassing field."

Dean of engineering David Lynch recently presented professors and graduate students with more than a dozen teaching awards as part of an annual ceremony to celebrate excellence in teaching.

Gordon Thomas Lee, who was presented with his third award for excellence in teaching outside of the Faculty of Engineering, delivers an

economics course entitled "Principles of Economics for Engineers."

"Engineering students have incredible problem-solving skills and in the course, we get them to apply those skills outside their comfort zone," said Lee, adding that he enjoys teaching engineering students. "Their time constraints are binding, and you start to understand right away that engineering students are very disciplined."

Like engineering, Lee says, economics is everywhere. The subject is important to engineers because it explains not only how the economy works, but also gives rationale for why particular regulations came into effect, and what their purposes are. Many engineering students, he added, go on to study business—the faculty itself offers a master's degree in engineering management—and economics plays

an important role in their education as well.

Greg Dechaine, who just became a new member of the faculty, received the Graduate Student Teaching Award, which is presented to graduate students who excel in teaching. After receiving the award, Dechaine headed straight into a classroom to teach a third-year chemical engineering course called Mass Transfer—the very course he'd earned the teaching award for.

"Getting the award is nice," he said. "I put a fair amount of effort into the seminars and tutorials that I was doing, so when you get an award like this it tells you that you are doing a good job and that the students recognize it and know when you are putting in the effort."

"It motivates you to keep putting in that effort." ■

What is Brainspan? Is that your final answer?

Michael Brown

Imagine a game-show type of quiz in the proud tradition of *Who Wants to Be a Millionaire* and *Jeopardy* where the grand prize and parting gifts are better marks.

Such was the brainchild of Judy Gnarpe, a professor in the Department of Medical Microbiology and Immunology and inventor of *Brainspan*, a revolutionary asynchronous, e-learning, multi-player quiz game that is harmonized with medical curriculum.

"I have been using e-learning games in teaching for about seven years as a way to get the students engaged," said Gnarpe. "Brainspan started out as an online learning game that just wasn't that much fun."

Knowing that engagement and fun go hand in hand, Gnarpe says she realized what was absent in her e-learning tools was a little competitive flavour

and instant feedback.

Brainspan co-ordinates access to a variety of course-specific multiple-choice-question games where students accumulate points based on how many challenges they master. Today, more than 4,000 students from five faculties are using the game as a serious learning tool, taking advantage of instructor feedback in the form of images, text and web links that lead the student out to other sources of information on the Internet.

"The software is a game or quiz generator so a professor can upload whatever questions they like; it is not dependent on any particular subject," she said. "Depending on how a professor tags the questions when they are put into the quizzes, students can get detailed performance reports."

"It basically gives students a chance to review their course content and see how their own performance is in the subjects they are studying."

Gnarpe says her plans for *Brainspan* began to take flight four years ago when then-dean of the Faculty of Medicine & Dentistry overheard some students talking about the game in its infancy.

"He called me in and said 'we need this in every course in undergraduate medical education,'" said Gnarpe. "We didn't have really good software for it then, so we needed to get support from the U of A's Academic Information and Communication Technologies."

The university's Teaching and Learning Enhancement Fund sup-

ported the project with \$128,000, while the Faculty of Medicine & Dentistry contributed a further \$100,000 toward the project, and the Department of Medical Microbiology and Immunology gave \$6,000.

"I began using the game in one of the classes I was teaching and the students loved it," said Gnarpe, who received the William Hardy Alexander Award for Excellence in Undergraduate Teaching in 2008. "They were playing and playing, and playing and I thought 'we are really engaging the students in the course content, and they're learning and they're study-

ing and they don't even know they are doing it."

Gnarpe says that, while nobody has ever been able to show that use of an e-learning tool results in better performance on exams, she believes there is a greater force at work.

"It does increase engagement, which means students spend more time working on the courses, more time studying and, I hope, there's better retention in the long run," she says. "The students themselves say they think it relieves their stress, and most are really satisfied with it; they want more questions." ■

"They were playing and playing, and playing, and I thought 'we are really engaging the students in the course content, and they're learning and they're studying and they don't even know they are doing it.'"

Judy Gnarpe

McCalla professor Harde at work

Christopher Thrall

Roxanne Harde's interest in American literature and culture takes her students through studies by period, genre and theme. Her devotion to the subject extends to contemporary culture as well: she co-edited a book discussing the lyrics of Bruce Springsteen. However, Augustana's newest McCalla professor is not only considering what to teach, but how best to teach it.

The University of Alberta's McCalla Research Professorships provide faculty members with the opportunity to integrate their teaching and learning and research and selected academics are given valuable time to focus on a major project.

"I still feel new at Augustana, but Roger Epp, dean, encouraged me as a strong candidate, and now I can follow through with some important research on peer instruction and team-based learning," said Harde, who has been at



Roxanne Harde

McCalla Research Professorship

the University of Alberta's Augustana Campus for five years.

Through her McCalla research, Harde will evaluate peer education. In 2006, she helped start Augustana's Writing Centre, which offers students one-on-one consultations with a peer

tutor, workshops on all stages of the writing process and access to a writing reference library. Her research will generate a description of best practices for training Writing Centre peer tutors, with a focus on faculty engagement.

"Right now, we have about 60 tenure-stream professors at Augustana," explained Harde, "and I wonder what we can do to get them all involved in the Writing Centre."

She also hopes to find new strategies for teaching in the senior-level literature classroom. "I want to get students to engage in 19th-century literature the same way I do," says Harde. "I intend this research to take what I have already

learned about peer education and team-based learning, and extend it both into my own classroom and into the practices of faculty members at large." Harde will take some of her findings to an international conference on writing centres in the fall.

"Dr. Harde is someone who is not only invested in teaching and supporting the writing centre, but also is also thinking about how writing is taught," says Epp. "I am glad to see her interest in the pedagogy of writing recognized with a McCalla Award."

McCalla Research Professorships were named for Arthur McCalla, the first dean of the Faculty of Graduate Studies and Research at the U of A. Recent Augustana staff who have received a McCalla professorships include Milton Schlosser, music professor, received his McCalla Professorship in 2007-08 to investigate neuroscience-based strategies for the effective use of video recordings by pianists and piano teachers. Geography and environmental studies professor Glen Hvenegaard's award in 2008-09 allowed him to examine fieldwork instruction. ■

Preparing for NASA's first furlough day

Folio Staff

voicemail messages, for example.

July 2 is also a non-teaching day for most faculties; however, some faculties will have classes running, and some units will still have students to serve (e.g. residence services). In all cases, logistics need to be carefully considered including matters related to safety, security and access.

For information regarding specific service levels on July 2, please contact the appropriate faculty or service unit. ■

The following service levels will be offered by these central units:

Open:

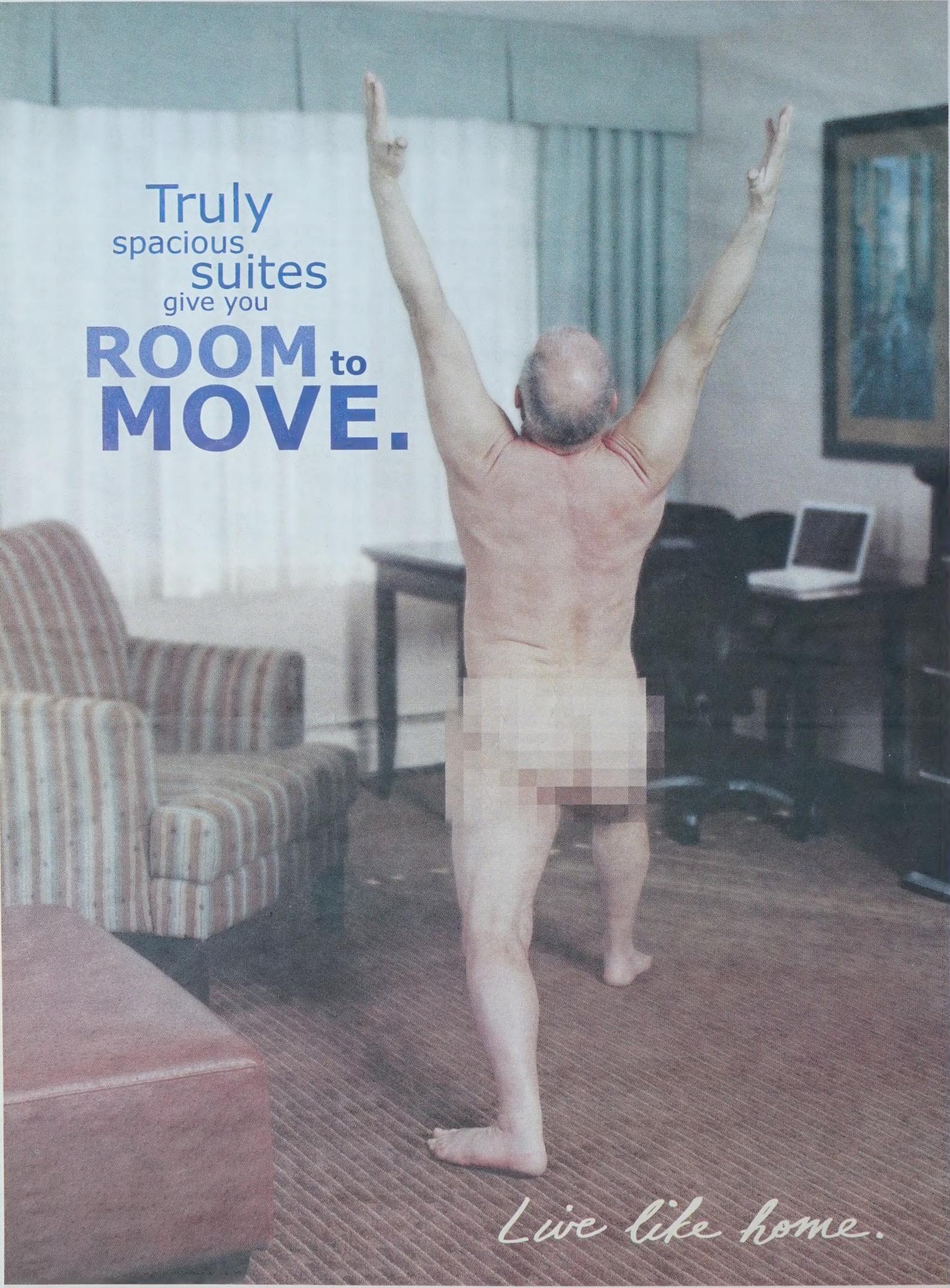
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World's top conservation biologists descend on the U of A



More than 1,700 people from all over the world are expected to attend the Society for Conservation Biology International Congress for Conservation Biology in July, hosted by the U of A, to discuss new research and developments in conservation science and practice.

Wanda Vivequin

Conservation biology takes centre stage in Edmonton July 3 to 7 as the University of Alberta hosts the world's most important international meeting for conservation professionals and students.

More than 1,700 people from all over the world are expected to gather to discuss new research and developments in conservation science and practice at the Society for Conservation Biology's International Congress for Conservation Biology. It is only the third time the congress has been held in Canada since it began in 1988 and is a first for Alberta.

U of A biologist and conference steering committee chair Mark Boyce said the conference provides a perfect

opportunity to showcase some of the incredible work being done at the U of A, which he says is recognized as Canada's most productive conservation biology research institution.

"This is the world's largest gathering of conservation professionals, and we believe it is very significant that all of these conservation professionals are coming to Alberta," said Boyce.

The theme of this year's congress is "Conservation for a Changing Planet."

Boyce said industrial development and agriculture are changing landscapes. Carbon emissions to the atmosphere are changing climates and nowhere on Earth are changes to climate having more drastic effects on ecosystems and human cultures than in the North.

"Circumpolar caribou and reindeer

populations are declining with huge consequences for indigenous peoples of the North, motivating our use of caribou in the conference logo," he said.

"Developing conservation strategies to cope with our changing planet is arguably the greatest challenge facing today's world and its biodiversity and is foremost on the agenda of this year's congress," Boyce added.

Boyce said of particular interest to the public is a speaker series being held each day of the conference at 4:30 p.m. at the Shaw Conference Centre.

"We are fortunate to have attracted some of the world's most dynamic and important conservationists to speak at this series, including Dan Janzen from the University of Pennsylvania, who is possibly the world's most celebrated ecologist, well

known for his pioneering work in Costa Rica," said Boyce.

Janzen co-ordinated a major conservation initiative in Costa Rica that ultimately led to the establishment of Guanacaste National Park and has received numerous international awards for his conservation efforts. Janzen will speak on Saturday, July 3, at 7 p.m.

Also presenting at this speaker series are Shane Mahoney from Newfoundland and Tyrone Hayes from University of California, Berkeley. Mahoney is a world-renowned orator, perhaps best known for articulating the North American Plan for Wildlife. He has been designated the Global Ambassador for The Wildlife Society and his public lecture is entitled, "Fiddling While Rome Burns: Conservation's Divisions Thwart

Conservation Success."

The conference will also be the venue for an official presentation of the prestigious LaRoe Award—the highest award given by the Society for Conservation Biology—to the U of A's David Schindler.

Boyce says that, while the bulk of the congress will be held in the Shaw Conference Centre, a number of events will be hosted on campus, including some workshops and symposia.

"Perhaps most important is the graduate-student recruitment event on Monday evening being sponsored by the deans of science and ALES, which will end with the world premier of a National Geographic movie on Great Migrations," said Boyce.

More information on the congress can be found at <http://www.conbio.org/activities/meetings/2010>. ■

Industrial design going to the dogs

Bev Betkowski

It took about three seconds for Mia the cockapoo to settle her princess self on the plush cushion that crowns the "Stout K-9," a fanciful, swirling confection of a pet bed that far outshines anything available in stores.

With a wag of her powder-puff tail, Mia showed her approval, which was good news for one of the bed's young designers, University of Alberta student Reece Schulte. His class project is one of 19 pet loungers being donated by the U of A to help homeless animals.

Thanks to Schulte and other energetic industrial-design students in the Faculty of Arts, the beds will be silent auction prizes for Pets in the Park, a major fundraiser for the Edmonton Humane Society, being held June 27 at Sir Wilfrid Laurier Park.

The year-end classroom assignment challenged students to meld their artistic vision with hands-on hard work to design and build fun pet beds that are functional for Fido, but also appealing

to bidders at the auction.

"This was the first project of the term where they weren't designing for themselves; [this was] their first real introduction into designing for the real world," said Robert Lederer, a professor in the Department of Art and Design, who is overseeing the fifth year of what has become an annual course assignment.

"This is also a great way to show how our students can use their talents to become good community citizens."

The pet bed project was born as a tribute to Ewen Nelson, a U of A employee who asked that donations be made to the humane society in his memory before he died in 2006. Nelson was the manager of information systems for the Steadward Centre, where he worked for more than 15 years.

He also had a spinal-cord injury and was often consulted by Lederer and his colleagues for advice on user-friendly exercise equipment and other design projects. "He was a great resource for us, and we wanted to honour him in

some way," Lederer said.

From the design on paper, to sourcing the materials and building the final product, the students do it all. Some even succeed in finding sponsors to help pay the cost of the materials—all part of the learning curve, said Lederer.

"Part of the training we do with our students is talking to other interested parties to get the job done." Each bed represents about 100 hours of labour, he added.

"The students tend to live it because they know what they are doing is not going to end up in mom and dad's basement. This is going to be out there in the public eye."

Their efforts are appreciated, said Shawna Randolph, spokesperson for the Edmonton Humane Society.

"We greatly value the hard work and dedication from the University of Alberta and its students. Their contribution makes a huge difference to the animals that come through our doors."

Proceeds from the pet beds—which fetch an average of \$450 each—go directly to caring for the 11,000 animals that are tended to at the shelter each year.

Pet-lovers bidding on their favorite beds will find something familiar in the canine creation of Schulte and Matt Jeppesen, who chose architect Randall Stout as their inspiration. Stout designed the Art Gallery of Alberta, and its snaking, silvery lines are reflected in the Stout K-9, which won Mia's favour.

It was a case of trial and error to fashion the bed, which swoops this way and that in pliable birch, but Schulte is happy with the end result.

"We wanted to establish a link to Edmonton and have an energized aesthetic, but one that wouldn't disrupt the atmosphere of a home." ■



Reece Schulte demonstrates the proper use of the deluxe pet lounger he designed.

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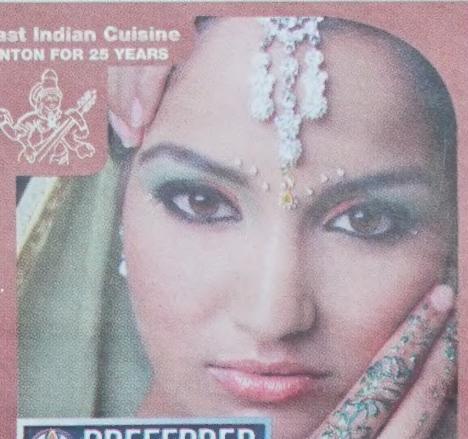
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U of A's Martian drillers win national award

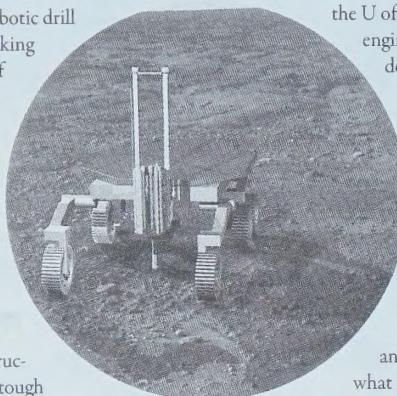
Brian Murphy

A team of University of Alberta engineering students has proven themselves other-worldly with their winning design for a machine meant to work on Mars. After sweeping the U of A's mechanical engineering student design awards, the four-member team took the National Design Excellence title last week with a robotic drill designed for taking core samples of the red planet.

"Winning the nationals in Victoria was our goal from the start," said team member Nicolas Olmedo. "We asked our instructors for a very tough design assignment, and we got it."

Michael Lipsett, a U of A mechanical engineering professor and team advisor, says a Mars core sampler has every challenge imaginable. "The planet has very harsh conditions, and the design has to be light, low-power, and robust, because it's a long way away for a service call if something goes wrong."

Lipsett is expecting that the Canadian Space Agency will soon



Rendering of the U of A-designed robotic drill for taking core samples from Mars.

announce a new call for proposals for a core drilling unit designed for Mars. "The prototype would be tested at a Mars analog site, a place like the high Arctic that approximates conditions on Mars," said Lipsett. "American and Canadian companies that build robotic devices for the CSA and NASA will be looking for core-drilling technology and the U of A will be ready."

In addition to Olmedo, the U of A mechanical engineering student design team includes Stephen Dwyer, Jamie Yuen and Jessica Patzer. The prospect of contributing to a device that could go to another planet is what intrigued Patzer about the challenge. "This could be the first step

towards a U of A-designed core sample going to Mars in 2018," she said.

Earlier this spring, U.S. President Barack Obama refocused NASA's space exploration plans. New rover missions to Mars are planned for 2018 to prepare the way for a long-hoped for manned mission sometime after 2030.

Because it takes a spacecraft about

six months to get to Mars, space agencies believe a manned mission will require the crew to spend time on the planet. Lipsett says a drilling unit will be essential tool for the safety of human visitors. "You can't do reliable habitat construction if you don't know the characteristics of the rock and soil," said Lipsett.

He explained that an extended stay on Mars would require the crew to be self-sufficient, which means exploratory drilling deep into the planet. "Eventu-

ally they'll need to do some mineral extraction to produce basic chemicals for building materials, propellants, and even fertilizers."

After more than 30 exploratory missions to Mars by Russia and the U.S. with orbiting satellites and surface landers, there is still no final answer on whether or not life has existed on the planet. Lipsett says drilling for core samples is necessary to answer the question. "Any organic material at the surface has been degraded by the con-

stant bombardment of radiation," said Lipsett. "We'll have to go deeper than that to find evidence of life."

The U of A's Mars driller design team knows that when a core-sampling unit eventually reaches Mars, the answer to the question of "life" will be a high priority. Team member Olmedo looks forward to the answer.

"It would be the achievement of a lifetime if we could in some way contribute to determining whether there is life on another planet." ■

Built for speed



Michael Brown

The installation of the Butterdome's new \$1.5 million track surface was completed this week, ahead of schedule. The only indoor 12-lane straightaway in Canada, the track, says Georgette Reed, head coach of the U of A track team, will provide a softer, safer and faster track conditions for athletes. "This is similar to the surface used at the 2008 summer Olympics in Beijing. Our athletes are very fortunate to have access to such a high-quality track," she said.

Solar power project unveiled at Augustana

Christopher Thrall

Late last month, Roger Epp, dean of the University of Alberta's Augustana Campus, welcomed summer in an unconventional way when he peeled the protective covers off 10 solar-

thermal panels installed on the roof of the Convocation Centre. The panels will heat water for use in the cafeteria and gymnasium.

"The Green Campus Committee works on a number of initiatives to make the campus more sustainable," said Epp. "Their signature project

is the solar power project.

With this project and many others like it, Augustana is demonstrating its commitment to sustainability and environmental responsibility."

The Green Campus Committee on the Augustana Campus was

established in the fall of 2007 as an advisory committee to the dean. The group consists of students, staff and faculty members from various departments and addresses all things related to sustainability. Some of its projects have included battery recycling stations, a campus bike-share program, polystyrene reduction strategy and a trayless cafeteria to reduce water consumption.

To make the solar-thermal panels work, Glycerol is circulated within, and can reach a temperature of up to 350 F. The fluid is then circulated through water holding tanks to heat the water. The panels will end up relieving 20 to 30 per cent of the heating energy requirements that formerly relied exclusively on non-renewable sources.

Funds for the project came from a number of sources, including private donations to the Augustana Sustainability Fund and significant support from Viessmann Solar Systems. The Class of 2010, having spent four years on campus, wanted to leave a legacy at Augustana and donated to the project as well.

"This solar power project really speaks to the triple bottom line of sustainability: environmental, economic

and social benefits," said Candice Tremblay, sustainability co-ordinator. "Use of renewable resources speaks to the environmental benefits, while the economic benefits will be seen as soon as the energy costs we save exceed the capital cost of the project. Finally, as both a learning tool on campus and as an example for other businesses or institutions—in Camrose or around the world—the project has incredible social benefits as well." ■

"With this project and many others like it, Augustana is demonstrating its commitment to sustainability and environmental responsibility."

Roger Epp

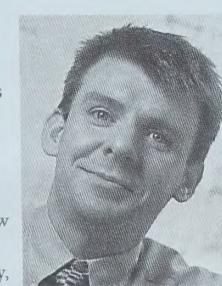
Augustana Campus Dean Roger Epp unveils 10 solar-thermal panels.

Supplied

Brian Murphy

University of Alberta researcher Ian Mann has been honoured as one of Canada's top 40 under 40 by an advisory panel of business people for the *Globe and Mail* newspaper. Mann appreciates the recognition, but says what he's really excited about is how the award will raise the profile of his area of study, space physics.

"The world is on the verge of a revolution in space science and engineering, and I believe the award reflects the renewed importance of space research to



Ian Mann

Canadians," said Mann.

Since 1995 a Canadian-business consulting group has taken nominations for a select group of 40 Canadians under the age of 40 who stand out because of their leadership, innovation, development strategy and community involvement.

The top 40 were chosen from among more than 1,000 nominees in a variety of fields. The judges gauged Mann's performance on his work as Canada Research Chair in space physics, principal investigator for the Canadian Space Agency's space storm research, and co-director of the Institute for Space

Science, Exploration and Technology at the U of A.

Mann, who emigrated from England to Canada in 2003, the accomplishments come from a labour of love.

"Canada has given me the opportunity to pursue cutting-edge research in space science," said Mann. "This is an honour, a great motivator, and brings its own reward."

Mann's recognition is well deserved and timely, says Gregory Taylor, U of A's dean of science.

"Ian's research projects, which improve our understanding of space weather and how to limit effects on satellite communications and space activities, present enormous economic opportunities for Canada," he said.

With the launch this month in the United States of SpaceX, the first pri-

vately funded spacecraft, Mann says a new space race is on and Canada, with the fourth-largest aerospace industry in the world, must be ready to get in the game.

"The training of the next generation of space scientists, engineers and even astronauts, combined with strategic economic investment partnerships, can ensure Canada benefits fully from this upcoming space bonanza," said Mann.

Mann admits to a lifelong fascination with space and he looks forward to sharing the dream.

"Imagine space-based monitoring of the Northwest Passage and the environmental impact of the oilands or natural disasters, and imagine 40-minute sub-orbital passenger flights from Toronto to Sydney, Australia." ■

U of A star gazer named top 40 under 40

Increasing factory output dependent on line combinations

Jamie Hanlon

You wouldn't think that there would be much similarity between a hockey line and an automobile assembly line. However, University of Alberta management-science researcher Ken Schultz says that both groups can learn something about line design and human behaviour, which may help them perform better.

Schultz, who recently published an article in *Management Science*, analyzed production-line data from a General Motors plant and identified that there seemed to be a shift in how fast the task was completed. What he and his fellow researchers hypothesized was that these workers, who were performing similar tasks, were positively influenced by the performance of a fellow worker who completed his task more efficiently.

Schultz found that an individual's performance level may have a direct effect on what becomes a "good day's work," in that some workers may change their behaviour to match

the output of their more productive co-worker.

Schultz ties the results of their study to the principle of equity theory, or the idea that motivation comes from fair treatment—a good day's work for a good day's pay.

An individual's performance level may have a direct effect on what becomes a "good day's work."

Ken Schultz

"The workers may think I'm not really connected, so I have no real reason to care about how fast you are working. But I'm a human being and I do care, and I do notice," said Schultz, who concluded that is possible for "people [to] change based on what they see."

Part of that change, Schultz found

in his analysis of the production-line data, was that, by changing up lines to introduce a higher-performing worker to an average or lower-than-average performing line, a positive impact can be made on efficiency or productivity.

However, Schultz notes, simply switching people on teams will not produce the desired effect. In a plant, as in hockey, knowing which players to change up will provide the most benefit.

"You'd look for the person who's a good performer but doesn't react to others around him; that's the person you want to move to the low-level team," he said, because "there's a good chance he's going to be a person who has proven to be a leader."

Schultz also noted that the design of the workspace is equally important in influencing productivity, yet is an aspect that is ignored when designing new plants or redesigning workspaces. The key is to arrange the area so that workers are facing each other when performing their tasks, rather than facing away from each other, or in the

same direction. Allowing the workers to observe and monitor the speed of their co-workers is the necessary catalyst for the behavioural change to occur, he says.

"You don't have to say anything, you don't have to do anything, you don't have to put a flashing light over their head," said Schultz. "Just make sure people can see each other and allow the workers to do what they would naturally do."

Thus, whether seeking to improve productivity or build a strong contender for Lord Stanley's Cup,

Schultz says that, while the environments and processes are different, being mindful of the human element and its motivational properties can produce the desired effect.

"Good coaches have seen this, and we have research that shows it's being done on the factory floor as well," said Schultz. "You want your team to have not just good, average, or even great players that can play well no matter where they are. To get that extra bit, you want to find the good or great players who will perform better around other great players."

Law grad formalizes a career as a social activist

Jamie Hanlon

Chief Justice Alex Bailey may have a nice ring to it, but it is not a position that's on the radar for this recent University of Alberta law grad.

"I think that chief justices have to be rather diplomatic," jokes Bailey.

But that is not to say that she does not have the skills or the talents to accomplish the goals. Bailey, who sees herself as a pragmatist, is happier effecting change at a more personal level. Especially when that change is needed to protect those who are marginalized and the most vulnerable.

"I think I'm better on the ground," she says.

An avid runner and writer, Bailey graduated from the University of Alberta June 9 with her law degree and believes her chosen career is a natural progression for her work as a social activist, which started in her teens on a trip to Nicaragua to build houses. She credits this trait to her grandmother, an activist herself, who took a young Bailey on one of her trips to southeast Asia.

"My grandmother has been doing work in southeast Asia forever, in various communities, mostly around gender and health issues, so it just came naturally to me," said Bailey.

Bailey capped her last year in law school by winning the Honourable Cecilia Johnstone Equality Award. Johnstone, a purveyor of women's rights, is another role model for Bailey because of her view of law, one that Bailey herself identifies with quite closely.

"She would look at the law and consider all of the implications of it, look at it relationally," said Bailey. "She had a few decisions where she said, 'I don't like what the outcomes of this law are, so we're going to change it.'"

Change is a constant theme in Bailey's activism, which has broadened since she started her post-secondary studies. She hosted a weekly radio show on campus radio called *Gaywire*; she was also involved with a variety of student groups and organizations, including Student Legal Services, the Women's Law Forum, the Law Show and OUTlaw, a group for lesbian, gay, bisexual/pansexual, transgender and queer law students.

Bailey, who was one of the founders of the group, also served as the president during her last year in law school. Her tenure with the group will be recognized for two key accomplish-



Alex Bailey

ments: getting OUTlaw recognized as an official student group by the students' union and establishing a mentorship program that links queer students with practising queer lawyers.

"It was clear to me that people want questions answered, like, 'can I bring my girlfriend to a firm dinner,'" said Bailey. "With the mentorship program, people can contact someone in a firm who identifies themselves as queer and ask, 'what is it like to work at this firm and be part of this demographic?'"

But, her activism does not stop with her own community. As she points out, there are a lot of marginalized groups, "for example, immigrants and the disabled," who face similar challenges. It is by no stroke of luck that her first job will be working with Alberta Justice, where she is looking forward to working in areas such as Aboriginal law and constitutional law. Beyond her year with the government, Bailey has a career map set out.

"Long term, I see myself working in a practice that is geared towards low-income people, gender-variant people, LGBTQ, women, women of colour," she said. "To me, it's really important to see the intersectional approach because many people in our community have a disability or are Aboriginal. Issues that affect these other groups, such as policing, affect us very similarly."

While she has accomplished much for herself and others with her activism, she quietly downplays her work and accomplishments, which, in themselves are noteworthy. Instead, as she points out that with her roles models, her own contributions are simply her way to bring equality to those around who are unable to fight for themselves.

"It's the least I can do," said Bailey.

Engineering student loses sight, not determination

Richard Cairney

Making it through the four years—and sometimes longer—it takes to earn a university degree is a challenge under any circumstances. But for Mikkel Arnston, who lost his eyesight halfway through earning his engineering degree, graduation wasn't such a straightforward proposition.

This month Arnston joined a class of 721 graduating engineering students. In his case, Arnston has earned a degree in mechanical engineering and a grade point average

of 3.7. And he now plans on working towards a second degree—in law.

Continuing his education and earning a second degree wasn't part of his original plan. "The plan was to finish this degree and see where it took me," said Arnston.

His engineering education was progressing smoothly when Arnston was diagnosed with Leber's hereditary optic neuropathy, a degenerative disease that has left him legally blind, with just some peripheral vision. The disease forced Arnston to leave the engineering co-op program, which provides students with paid engineering work terms, and continue his mechanical-engineering education in the traditional program.

"I used to sit in the back of classroom but then had to move closer and closer to the front to see what was going on," he said. "I knew I had to go to a doctor."

The disease moved quickly. Within six months of his diagnosis, Arnston was legally blind. The emotional impact was devastating and Arnston found himself questioning whether he should even continue his studies.

"It definitely was not easy to decide to stay in school and complete my degree," said Arnston, who credits "strong reliance on faith in God and help from family" with helping him adapt to his new reality.

There was also plenty of help available to Arnston through the university's Specialized Support and Disability Services, which provides support services for disabled students, faculty and staff at the U of A.

In Arnston's case, he was provided

with technological aids to help him with reading materials, and help finding classmates willing to photocopy and share their notes with Arnston. Fellow engineering students also volunteered to share notes—a favour Arnston found invaluable.

By the time he had lost his sight, Arnston's sister, Kari, had also enrolled in engineering. And although Kari imagined she might end up looking out for her brother, the opposite took place.

"He had already lost his eyesight when I started my first year—and so he was showing me around campus and where my classes were," said Kari, a third-year student who is also in mechanical engineering.

Now that he has completed his engineering degree Arnston plans to study law—he hopes to be able to fill a niche in the oil and gas industry, using his engineering education as a complement to law.

"In engineering you learn how things work, and in law you learn how people work," he explained. "In engineering you learn the rules of the physical world and in law you learn the rules of society."

Arnston says an elective class in business law sealed his decision to study law.

"I figured I would sample that course to make sure I wasn't getting into something that I'd find dreadfully boring, [but] I really picked up on it. Some things sound better than they are, so you have to do your due diligence."

Arnston is planning to write his law-school admission test this year and hopes to begin studying law next year, which goes to show that Arnston isn't the type of person who gives up easily. It wasn't long after losing his sight that Arnston realized there are few better places to be than a university campus.

"I figured there was so much to learn on campus that one degree wouldn't be enough."



Mikkel Arnston

news [shorts]

folio presents a sample of some of the research stories that recently appeared on ExpressNews, the U of A's online news source, and other campus news sources. To read more, go to www.expressnews.ualberta.ca.

Rehab med post-doctoral fellow publishes children's book

Jennifer Klein, post-doctoral fellow in the Department of Occupational Therapy in the Faculty of Rehabilitation Medicine, and Wen Kauffman have come up with an A-to-Z guide on fun adventures in and around the city. The book is entitled *Adventures of Edmonton: Your ABC Guide*.

"As mothers we want to have our children better connected to the city we live in and love," said Klein. "The book not only inspires children to read in an interactive way, but also encourages the entire family to get out and learn more about Edmonton."

The books will be sold at Save-On-Foods, Edmonton Valley Zoo gift shop, Greenwoods Bookshoppe, Wired Cup and other retailers in Edmonton. Books can also be purchased online at www.adventuresofedmonton.com. A portion of proceeds will go to charity.

Engineering graduates take second place in North America-wide design competition

Jessica Virostek, April Boyko, Heather Padavall, Mahfuzah Tukimin and Samantha Wojtkiw have taken second place in the prestigious AECOM engineering competition for their design of a wastewater reclamation facility.

The students in engineering professor Tong Yu's design class were required to take on one of two challenges presented by the engineering consulting firm AECOM to engineering students across North America. As it turns out, three teams from Yu's class entered the competition and each of them made it to the semi-final round of six teams. In the end, the team travelled to AECOM's New York offices to compete against the other finalist group, and eventual winners, from the University of Florida.

"These are amazing kids," said Yu. "It was a challenging level for the students. It was tough and they really did well. I was impressed."

Exercise may slow progression of ALS

U of A researcher Kelvin Jones, a recipient of a 2009 ALS Canada Discovery Grant, is leading a team looking at exercise as a new way to slow the degenerative processes of Amyotrophic Lateral Sclerosis, commonly known as ALS or Lou Gehrig's disease.

Previously, Jones has found that by stimulating the fast-twitch muscles in mice repetitively over a long period of time, the fast-twitch muscle converted to slow-twitch muscle. It was this transformation in the muscles that slowed the progression of ALS in the transgenic mice as fast-twitch muscles are more vulnerable to degeneration in ALS patients.

"If you have ALS, the more fast-twitch muscle fibre you have, based on the mouse studies, the quicker the symptoms of ALS come on. What we think is that if we try to build more slow-twitch muscle fibre in ALS patients it would slow the progression of the disease."

Now Jones is ready to take the next step: to conduct clinical trials with humans.

"ALS is incurable, but if exercise can make an ALS patient's life more comfortable, they're better able to manage the disease for longer and it makes their lives a little easier, it's worth pursuing," said Jones.

Beautiful Tweet tweaks global interest

Marc MacKenzie said it best in 140 characters or less and the professor of medical physics' tweet was selected as the world's most beautiful.

MacKenzie—or @marcmack on Twitter—submitted 35 tweets to the Hay Festival of Literature and Arts contest in Wales. It was, "I believe we can build a better world! Of course, it'll take a whole lot of rock, water & dirt. Also, not sure where to put it," which British actor Stephen Fry picked for top prize.

"I think it resonated in terms of having a bit of a deeper underlying message," said MacKenzie, a professor in the Department of Oncology, who had previously come fourth in a Canadian Twitter contest called Canada Writes. "Maybe one of environmentalism, possibly with a twinge of cynicism and maybe just a reminder that this is really the only world we have."

Finding out what makes toddlers tick

Developmental psychologist Sandra Wiebe is looking for volunteers who will help her understand how children aged three to six control their behaviour.

"One of the skills that develop over the preschool years is being able to think and learn to adapt your behaviour to the situation. [For example], when company's over, don't blurt out things that your parents might not want you to say and don't grab the candy in the grocery store checkout line," said Wiebe, a U of A researcher.

Wiebe and her assistants will be using a video game where the children will push a button to catch fish displayed on the screen, while avoiding others.

The children will be wearing a special hat similar to a swim cap, which contains 128 recording sensors that will allow the researchers to record brain activity, while they are playing the game. That information compared with the results of real-time activities of the preschoolers and a questionnaire filled out by parents.

If you and your child are interested in participating in Sandra Wiebe's study, please contact the Alberta Brain and Cognition Development Lab at 780-492-1277. ■

Donation a centrepiece of Canadian art history

Michael Brown

From its inception, the University of Alberta Art Collection has grown and prospered with the help of generous individuals through gifts of works of art and artifacts, or financial contributions. In the last seven years, more than 2,500 objects, primarily from donors, have been added to this campus-wide resource.

And while all are treasures, Alexander (Andy) and Margaret Andrekson—who have donated more than 100 works—recently donated an oil painting by Lawren Harris titled "Robertson Bay, Greenland," which stands out as a crown jewel in the U of A collection.

Harris was a founding member of the Group of Seven and a pioneer of the distinctly Canadian style of painting. "If you look at Lawren Harris' career, [this painting] is right at the tail end of his classic Canadian wilderness landscape work that he started with in Northern Ontario, then in the mountains and the North," said Jim Corrigan, curator at the U of A's Art Collection. "After that, Harris really moved toward theosophy-based

abstraction that was well away from what people think of as Group of Seven work."

Corrigan says "Robertson Bay, Greenland," is the catalyst for a bigger canvas by Harris called "Greenland Mountains" that hangs in the National Gallery of Canada. Even more interesting is that this prize of the U of A's Canadiana collection was given by Harris to long-time friend of the Group of Seven and famed Canadian painter, Emily Carr.

"This is a really important historical painting that wraps around historical figures in art history in Canada," said Corrigan. "It provides an example across several artists in a major time period of the development of Canadian art."

From Harris to Carr and on to the U of A, "Robertson Bay, Greenland" has, according to Corrigan, found a very important home.

"When things remain in private collections, they're not as publicly accessible," said Corrigan. "As far as providing an object for teaching and resource, collections are a major source



"Robertson Bay, Greenland" by Lawren Harris is on display in the TELUS Centre.

of how we gain knowledge from everything around us. Take zoology, botany, you name it, these are objects that provide the information and the knowledge that leads to discoveries, our understanding of the world, understanding of us, and our own social and cultural history.

"If that's not the job of a university, I don't know what is."

"Robertson Bay, Greenland" can be seen as part of the "human/nature: landscapes real and imagined" exhibit found in Gallery A in the TELUS Centre until July 3. ■

Celebrating the cornerstones of a 'great research library'

Michael Davies-Venn

With more than 10 million items in its collection, featuring seven million titles and a growing digital collection more than one million electronic books, the University of Alberta's libraries are in good company among other highly regarded research libraries in North America.

And libraries were at the heart of this year's U of A spring convocations, having nominated four individuals who were chosen to receive honorary degrees.

Ernie Ingles, the U of A's chief librarian and vice-provost, said at a June 8 gala to celebrate the nominees that this number of library-sponsored honorees has never been celebrated this way before in North America. In addition to receiving honorary degrees, the four, Ingles says, exemplify the U of A's

libraries' areas of global excellence.

Ingrid Parent, president-elect of the International Federation of Library Associations, congratulated Ingles at the gala for taking an impressive step "in recognizing and celebrating the achievements of librarians and libraries who are increasing access to information and preserving the world's knowledge."

"It's very appropriate that we're celebrating the theme of a great research library, since these great libraries in Canada and elsewhere are truly the custodian of the human record," she said.

The four honorary degree recipients are Hugh Anson-Cartwright, a veteran in preserving Canadian print culture; Brewster Kahle, a pioneer whose efforts have helped save 30 billion pages of the world's digital history; James Neal, a visionary helping to modernize libraries from analog to digital collections; and Kay Raseroka, the first African presi-

dent of the International Federation of Library Associations.

The celebrations included two new exhibitions from the U of A libraries: *Journeys Beyond the Neatline*, which documents two cartographers' trans-Canada bicycle journey, currently showing at the Cameron Library, and *The Other Side of Gold Mountain*, glimpses into Chinese Pioneer Life on the Prairies, at the Bruce Peel Special Collections Library.

Ingles said that having a supportive administration is key to the success of the U of A libraries. "The administrative executive team at the university—from the board, the president, the provost, the vice-presidents, the chancellor and deans—is the A-plus team in North America," he said. "The support and counsel I've received from the provost, in particular, has worked to make this university's libraries one of the great research library systems." ■

Returning to love's first bloom

Michael Brown

A love hatched at the University of Alberta has led to an unusual homecoming.

On June 19, Conference Services hosted, for the first time, a wedding ceremony in the second-floor lounge of the Lister Centre's Henday Hall.

"The bride contacted us and explained that she and her fiancé met when they were living in residence on Henday Two, and that they can't find anywhere that is as meaningful as the lounge," said Amy Stafford, conference co-ordinator for Conference Services, who has helped

marry people in the conference centre, but never in residence. "If somebody thinks this is the most meaningful spot, then we can help them out."

The lovebirds who tied the knot are Jennifer Marszalski, who graduated from the U of A with bachelor of arts degree in 2006, and Alec Selinger, who received a bachelor of science in computing science in 2005.

Marszalski, who met Selinger during the 2002-03 school year, says Conference Services was responsive to the couple's odd request and more than excited to help out.

"[Conference Services] did wonder if the area could

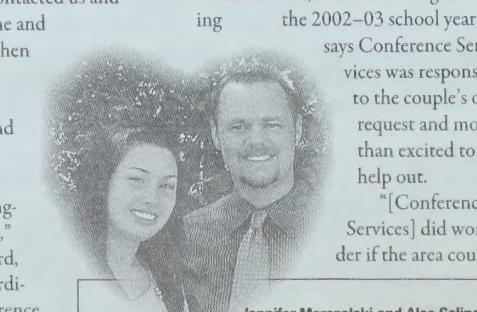
hold 100 people, but told them, 'we used to have parties there with more than 100 people; it will be fine,'" said the bride.

With the fire marshall's blessing, Conference Services blocked off the lounge as well as the couple's old rooms. Conference Services also set out the seating, but beyond a good cleaning, the spot is already perfect.

"We put some lights in a couple of fake trees, but nothing else," said Marszalski. "There is a wall in the lounge that is bright blue with a big bow on it, that's just Lister. We wanted to go minimalist; that's the place we chose and we chose it for a reason."

And while Conference Services respects the couple's spartan wishes, Stafford pulled out one stop.

"We provided two campus peace officers in their formal uniforms, with their long sleeves and tie," she said. "We thought that would be nice." ■



Jennifer Marszalski and Alec Selinger

talks & events

Talks and Events listings do not accept submissions via fax, mail, e-mail or phone. Please enter events you'd like to appear in folio and on ExpressNews at: www.uofaweb.ualberta.ca/events/submit.cfm. A more comprehensive list of events is available online at www.events.ualberta.ca. Deadline: noon one week prior to publication. Entries will be edited for style and length.

Until Aug. 20

The Other Side of Gold Mountain: Glimpses of Chinese Pioneer Life on the Prairies from the Wallace B. Chung and Madeline H. Chung Collection. This exhibition of documents, photographs and artifacts provides significant insight into Chinese pioneer life on the Canadian Prairies. The Noon-4:30 p.m. B7 Rutherford South Rutherford Library, North and South (Humanities and Social Sciences).

June 18-20

2010 Summer Solstice Festival. The Edmonton Chamber Music Society brings together some of North America's finest musicians in a three-day festival of chamber music. Friday's program, "Stories and Legends," features works inspired by gothic fables and folk tales. "Jazz Inflections," is the second of the three concerts. The program highlights the reach and influence of African-American musical expression through the last century. The final concert of the festival features three works of great beauty and emotional depth - Beethoven's Trio in B-flat Major, Barber's beloved String

Quartet no. 1, and Brahms' Piano Quartet no. 2 in A Major. Pre-concert lecture begins at 7:15 p.m. for shows on June 18 and 19 at Arts and Convocation Hall. On June 20, a pre-concert lecture, in Memorial Hall, adjacent to Robertson-Wesley United Church, begins at 2:15 p.m. Tickets from TIX, the Gramophone and at the door. 8 p.m. <http://edmontonchambermusic.org>.

June 19

WISER Family BBQ. The outdoors, fun games, casual networking and free BBQ! Where can you find them all at once? The Women in Science, Engineering and Research group invites you to come out and enjoy a fun barbecue. This event is children friendly so bring your family! 11:30 a.m.-3 p.m. For more information, go to www.wiser.ualberta.ca.

June 20-23

Canadian Association of College and University Student Services Annual Conference. The U of A, jointly with MacEwan University, NAIT, Norquest College, Concordia University College and

Yellowhead Tribal College, is hosting the CACUSS 2010 Conference. This will be the first time this conference has been held in Edmonton and will bring together professionals and student leaders from across Canada to share and discuss issues related to students. 8 a.m.-11:55 p.m. Students' Union Building. For more information, contact David Newman at david.newman@ualberta.ca or 780-492-4998.

June 21-25

Thinking Qualitatively 2010. This week-long interdisciplinary educational series allows participants to engage with experts in qualitative inquiry and learn about specific methods, techniques and approaches to qualitative research. The academic program consists of five days of hands-on workshops on such topics as qualitative coding and categorization, participatory action research, discourse analysis, literature reviews, arts-based methods, poststructuralism in qualitative research, and much more. 8 a.m.-4:30 p.m. Stollery Executive Development Centre Business. www.uofaweb.ualberta.ca/iiqm/TQ2010.cfm

June 22-25

Canadian e-Learning Conference 2010. Launched in 2003, this conference has developed into an engaging venue for practitioners, instructors, administrators, and students alike to share ideas and evidence on technology enhanced learning and teaching. 9 a.m.-noon, TELUS Centre. www.celc2010.ualberta.ca

June 25

Campus Sustainability Pilot Tour. Knowledgeable student interns will guide you on a walking tour of campus. You will learn about sustainability initiatives and practices currently being applied on North Campus. Spaces are limited. Please go to www.sustainability.ualberta.ca to RSVP and secure your spot. 10:30 a.m.-noon.

June 28

Implementing Nutritional Guidelines in Elderly Care in Sweden. Anja Saletti and Johanna Töremä, from the Department of Public Health, Clinical Nutrition and Metabolism, Uppsala University, Sweden, will be on hand to give a talk on nutrition issues in Swedish elder care. Noon-1 p.m. 6-107 Clinical Sciences.

July 5-23

CILLDI - 11th annual Canadian Indigenous Languages and Literacy Development Institute. CILLDI is an intensive, annual summer school held every July. Its goal is to train First Peoples' speakers and educators in endangered language-related subjects. Assiniboia Hall. www.clldi.ualberta.ca

July 5

The Punjabi Sikh Diaspora and Cardiac Rehabilitation. Presented by Bindy Kang, project director; Dhil Dhee Sehayth, Cardiac Rehabilitation Project, Centre for Nursing & Health Behaviour Research, School of Nursing, University of British Columbia; and Paul Galdas, assistant professor, School of Nursing, University of British Columbia. Noon-1:30 p.m. 6-10 D University Terrace.

June 25 & 26

NVivo Qualitative Software Training - Beginning. The IIQM is offering two independent full-day NVivo workshops. In this hands-on session, participants explore the qualitative research process as well as the specific capabilities of the software. 9 a.m.-4 p.m. www.uofaweb.ualberta.ca/iiqm/nvivo2010.cfm

July 12

Special Seminar: "Temporal Patterning in the Drosophila Bristle Lineage," presented by Michel Gho, Biologie du Développement, Université Pierre et Marie Curie, Paris, France. Noon-1 p.m. M 149 Biological Sciences.

The Other Side of Gold Mountain



This exhibit, which tells the story of Chinese pioneer life on the prairies through the eyes of Wallace Chug, is on display at the Bruce Peel Special Collections in the Rutherford Library until the end of August.

classified ads

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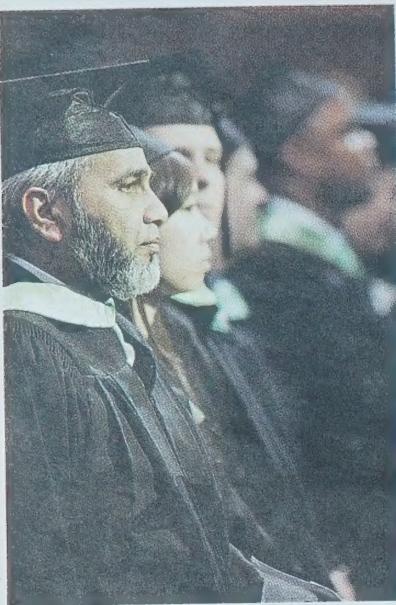
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Michael Davies-Venn



the BIG day

2010 SPRING CONVOCATION



From June 2 to 10, the University of Alberta's Northern Alberta Jubilee Auditorium was flooded by a sea of gowns, mortarboards, fond memories, well wishers and, of course, camera flashes.

This page is just a sampling of the sights captured during a week of celebrating that saw more than 6,700 students receive their hard-earned degrees. ■

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